

# WIRELESS CONSULTANTS

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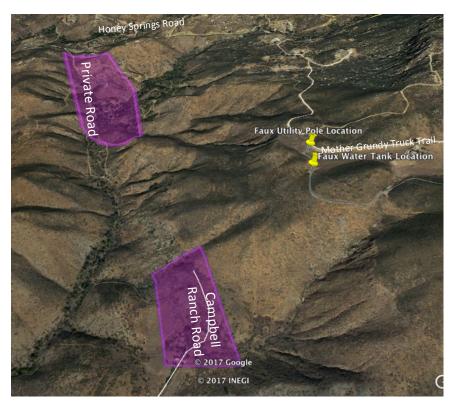
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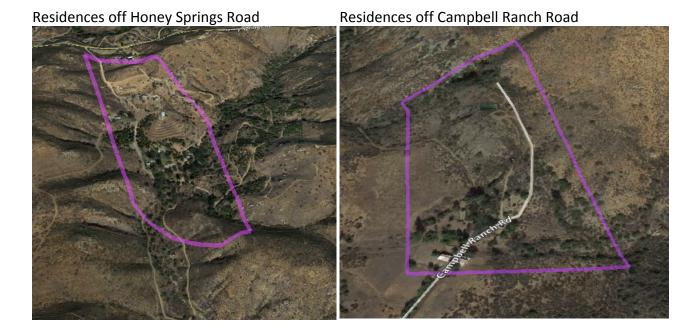
### **ALTERNATIVE SITE ANALYSIS**

### Project Site & Coverage Objective

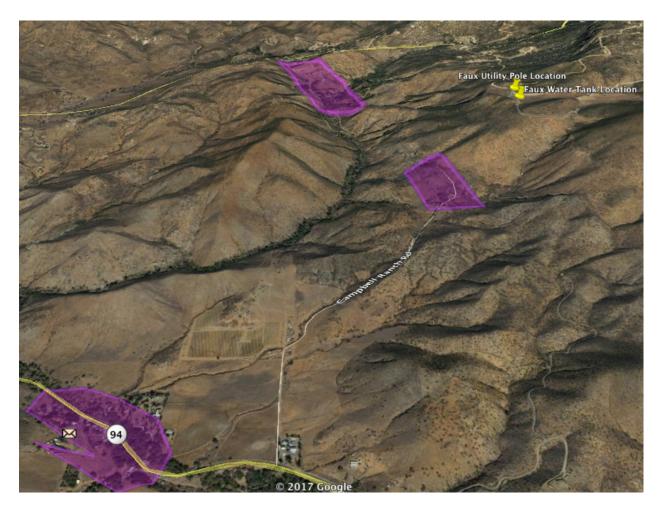
The proposed telecommunication site is located on Mother Grundy Truck Trail off Honey Springs Road within the Jamul/Dulzura Community Plan Area. The property is zoned A-72 (General Agricultural). The surrounding properties are zoned similarly (A72). There is no current use of the property as it is vacant. The project elevation is approximately 2085 to 2095 (AMSL).

The target coverage objectives for the ring are the residences off Campbell Ranch Road and the residential neighborhood south of Honey Springs Road. (areas shown in purple below). The proposed site reaches both of these objectives by its location at over 700 feet higher in elevation and strategic positioning amongst the rolling hills situated between the residences in the valley and the subject site. The proposed sites and structures are designed to provide the most efficient coverage to the residential areas and also sufficient support to existing sites in the area, handing off coverage in a seamless way.





In addition, the site will cover gaps along Hwy 94, where additional residences are located.



The faux water tank and faux utility pole are designed to match the character of the rolling hillsides and agricultural nature of the area. The aerial to the left shows the challenge in

reaching the low-lying residential areas below the subject site. Due to a large hill between the two structures proposed, one structure on its own will not be able to reach all of the coverage objectives to the west. The water tank would need to be at least 80 feet tall to be able to see over the hillside to reach the coverage objective to the northwest. Therefore, one sector has been strategically placed to the north on a faux utility pole to meet this need. Without both structures, the site would be missing a crucial coverage objective and would not be effective enough to be pursued.

When searching for a site for this AT&T search ring, the original goal was to address the coverage objective utilizing the fewest number of installations possible. The site search first attempted to identify preferred zones and land uses, as required by the Zoning Ordinance.

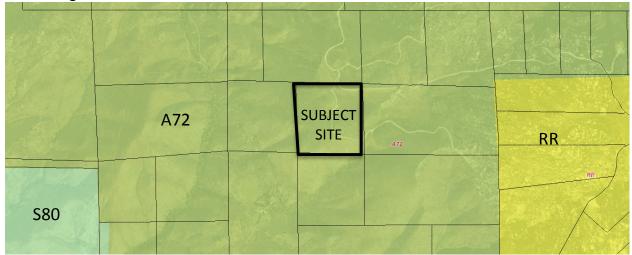
# Preference Categories

Section 6986 of the Telecommunications Ordinance (Preferred Sites) identifies the preference categories assigned to proposed zones and locations. The project site is zoned A-72 (General Agicultural), which is not a preferred zone for telecommunications facilities. The project location is on a site developed with a residence on a partially cleared property. Per Section 6983 L.3 of the Zoning Ordinance this includes "facilities ...that are camouflaged from public view through the use of architectural treatments, such as cupolas, faux water towers, windmills or other structures and which are consistent with existing development and community character." The proposed 35-foot tall water tank and 30' tall faux utility pole, will appear as natural elements that would disappear from public view as an accepted feature of the community.

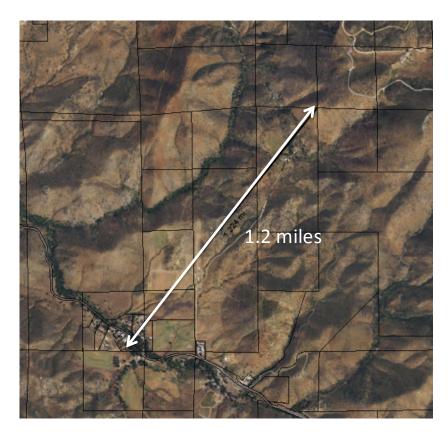
Below is a list categories that the site development team explored prior to arriving at the proposed location.

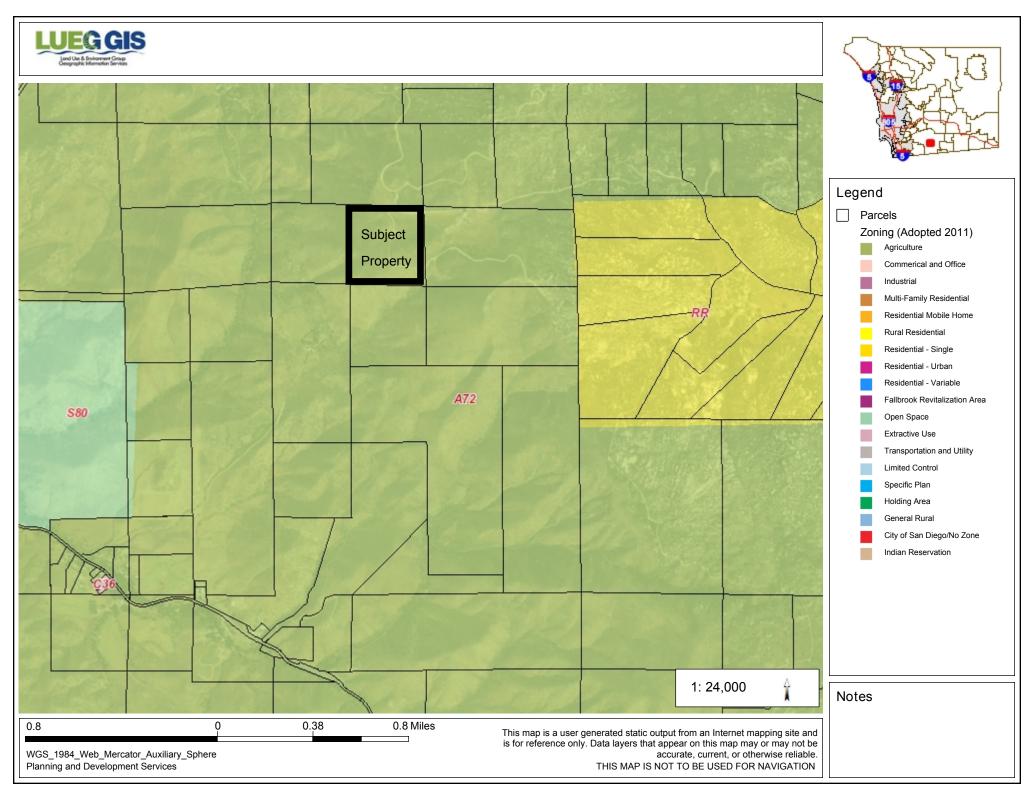
# Preferred Zones: Industrial and Commercial

Within and around the project search ring there are no industrial or commercial zones. Due to the topographical variations within the area and the coverage needs, this particular search ring was extremely narrow. The surrounding area is solidly agricultural and rural zoning (A72, S80 and RR). There are no industrial or commercial sites within the search ring area.



The closest non-residential zone (S80) is located west of Hwy 94 within Lawrence and Barbara Daley Preserve and it is over 2.5 miles from the subject site. In addition there are two parcels zoned C36 along Hwy 94 (See zoning map on next page). These parcels are over 1.2 miles from southwest of the subject location and on the other side of Hwy 94. Being on the other side of Hwy 94 inhibits full coverage of the site and the sites ability to meet the coverage objective because of the drop in topography and the traffic along the 94 could potentially monopolize the site's signal and not allow any coverage to go beyond the 94. There is also a substantial drop in elevation to the southwest where these two commercial parcels are located, which would compromise the expanse of the coverage offered by the proposed site.





- Preferred Locations: The site is proposed at a non-preferred location. However, an agriculturally zoned property is appropriate for a telecommunications facility in this area as there are no other preferred locations within the immediate area.
  - O Public Right of Way / Utility Poles / Traffic Signals / Street Lights
    Public right-of-way solutions were sometimes relied upon with earlier generation wireless facilities when the requirements for data capacities were less and quick voice-only coverage solutions were acceptable. The current generation of AT&T broadband installation requires a minimum of 240-square-feet of base station area and the capacity to carry 12 panel antennas. No public right-of-way location was identified that could accommodate the AT&T facility required to provide adequate coverage and service level to the target area. Again, the significant topographical constraints and the amount of right-of-way installations that would be required make utilities poles obsolete and infeasible in this area. Furthermore, there are no traffic signals or streetlights in this rural neighborhood to even examine for structural capacity.



### O Water Tanks

Water tank sites are preferred solutions for wireless sites since they represent a non-residential land use, frequently located within residential areas and located on high

ground. As evidenced by the aerial above, there are no water tanks in the immediate vicinity of the project site.

#### O Non-Residential Land Uses

This property is 40 acres in size and is not currently used for residential uses. The site is large enough that the telecommunications site would only occupy a small portion of the lot and there would still be ample room for a residence in the future. The only purely non-residential use in the immediate area is the preserve to the west, which was not a viable option for this search ring. The elevation of the proposed facility is approximately 2000 feet whereas property to the west of the site is much lower (approximately 1200 to 1500 ft.). For this reason, the preserve is not viable and would not meet the coverage objective of the site. In addition, rolling hills and sensitive biology make it difficult to locate a site in this area and meet the coverage objective fully. Some residences may lose out on coverage due to topography and hillsides blocking the site. Furthermore, trenching and building in a sensitive biological area would increase the impact of the site and require much more mitigation, which is highly undesirable. Other opportunities for non-residential land uses were nonexistent within the search ring.

# O Co-location Opportunities

There were no known collocation opportunities within the search ring. Due to the specific needs of the area and the scarcity of telecommunication sites within the Jamul community, collocation was infeasible.

# O County or Government Facilities

There are no identified county buildings or government facilities in this area that can satisfy the coverage objective. In addition, a site on a county or government facility would still require the same elevation, accessibility and either two structures or one taller structure to achieve the same coverage.

#### Agricultural/Residential Parcels

The coverage objective was very specific for this ring because of the Federally-mandated Fixed Wireless Local Loop objectives to deliver broadband internet to the nearby residents. Due to the topography, the subject site just west of 1500 Mother Grundy Truck Trail, offered the most potential for a complete coverage answer. Although this site is zoned agricultural, its general plan designation is Semi-Rural Lands and the site provides topographical screening opportunities making it the ideal location for citing a wireless facility.

The subject facility is located in a non-preferred zone (A72), and it is not within a preferred location. However the site has been designed to be in harmony with the aesthetics of the surrounding neighborhood. Furthermore, the antenna location and design, with the water tank and faux utility pole as "screening" mechanisms, helps the AT&T facility blend with the surrounding community character and appear as a natural element for views up the hillside. The low heights of the two structures make them disappear amongst rolling hills so they will not be visible from most of the public roads off-site. Furthermore, with the faux utility pole, antennas and radios will be painted to match the color of the faux utility pole. In regards to the

faux elevated water tank, the panel antennas and microwave antenna will be completely concealed within the faux water tank and therefore will not be visible. These design measures would help disguise the wireless facility from various vantage points.

• Open Space (S80)—Located Southwest of the Site (see map above)

This is the only other non-residential or agriculturally zoned area surrounding the subject parcel. It is not a preferred zone and would require much more biological and environmental impact if the proposed facility was cited within the Lawrence and Barbara Daley Preserve.

#### Oher Sites Examined

The only other ste examined to meet the coverage objective of the ring was a site further along Mother Grundy Truck Trail (APN: 600-110-04), southeast of the proposed site, approximately 0.4 miles away (see aerial below). This property had significant construction contrains and would be more highly visible as it is located on the peak of a hillside standing on its own without rolling hills all around. Furthremore, Border Patrol has an existing lease on this property where they operate equipment that could potentially interfere from time to time with AT&T's frequencies\_rendering the site useless from a technological perspective. In addition, the Border Patrol needs complete control of the area to be able to do their job effectively, this invites competing interests and AT&T could potentially interfere with the Border Patrol with equipment installation and frequencies. Therefore, the site was ruled out due to a number of challenges and significant contraints.



Besides the aforementioned site, the subject property was the best and most ideal location for the radiofrequencty engineer to meet the AT&T coverage objective. Other locations on this property as well as one, taller structure were explored; however, two structures at a lower height was the most logically and efficent way to meet the coverage objective while also minimizing the visual impact as much as possible. The taller structure would need to be at least 70 feet to clear the hillside to the north of the faux wanter tank location. This would not only increase the visual impact of the facility but it would also incease the footprint and footing of the tank and it would encroach into adjacent biologically sensitive areas. Therefore it was not feasible to consolidate all sectors within one structure.

# Public Benefit

The serious lack of coverage in and around the project area has significant public safety considerations. The majority of 911 calls are now placed by wireless telephone, and many of the emergency responders now rely upon the wireless networks to a large degree for their communications. The proposed wireless facility would be E-911 compliant, meaning that emergency calls placed from the wireless phones of other carriers would connect through the proposed AT&T site. In such hilly areas, regular radio communications may not be reliable, but the cellular networks provide secure communications for areas having network coverage. Also, the wireless systems have the ability to locate lost, injured or stranded persons with the GPS aspect of the cellular networks. These rural communities of the County are vulnerable to isolation in the event of wildfires, earthquakes or other public emergencies if regular landline communications become severed. The installation of the proposed AT&T facility would greatly enhance personal, business and emergency communications for this rural community San Diego County.